VRX

VRX Company Inc

VRXLoader User Manual

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Document Abstract:
This User Manual details installing and operating the VRXLoader windows application.

Revision Chart

Version	Primary Author(s)	Description of Version	Date Completed
Draft 1	**FLE**	**Initial draft created for distribution and review comments.**	**20070712**
Release	FLE	Release for customers.	20080424
Rev 2	FLE	Update to VRXLoader V1.6 Add images for J1 location.	20100330
Rev 3	FLE	Correct formatting errors.	20100615
Rev 4	FLE	Clarify references to VR2003	20100921

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VRX

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1 VRXLOADER Overview

The VRXLOADER is a Windows application which workers with the embedded boot loader in the VRX Company Text Inserters and similar products. The VRXBOOT is the actual firmware in the Text Inserter. The VRXLOADER consists of an executable or EXE file, an initialization or INI file, and CHM and DLL files.

You may receive one or two files for the target hardware (the Text Inserter). The first is an encoded or ENC file which is the actually application file you will load into the target device. The optional EE file is the file which contains the user interface setup conditions and may contain alarm Key Words.

Notices:

VRXLoader(TM) and VRXBOOT(TM) is property of the VRX Company.

Windows(TM) is a trade marked name of Microsoft Corporation.

WinZip(TM) is a trade marked name of WINZIP Computing.

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2 Tools, Computer, COM Port and Cable Requirements

You may need a #1 Phillips screw driver.

The VRXLOADER is a Windows(TM) application and must run on a windows PC. It has been tested on Windows versions ME, 2000, XP and Windows 7.

Your PC needs a serial COM port. You can use a USB to COM port adapter to add a COM port to newer PCs that often do not have COM ports. Please refer to the user manual of your USB to COM port adapter for instillation instructions if the adapter does not automatically install.

For the VR2004, You need a DB9F-DB9M straight through serial cable to connect from the PC COM port to the Serial Output of the Text Inserter.

For the VR2003 you will need a DB9 F-F gender changer.

While not required for uploading software into the the VR2004, we also recommend you always carry a DB9 Null Modem adapter, a DB9 MM Gender Changer and a DB9 FF Gender Changer. This can often save you a drive when installing and trouble shooting serial port connections.

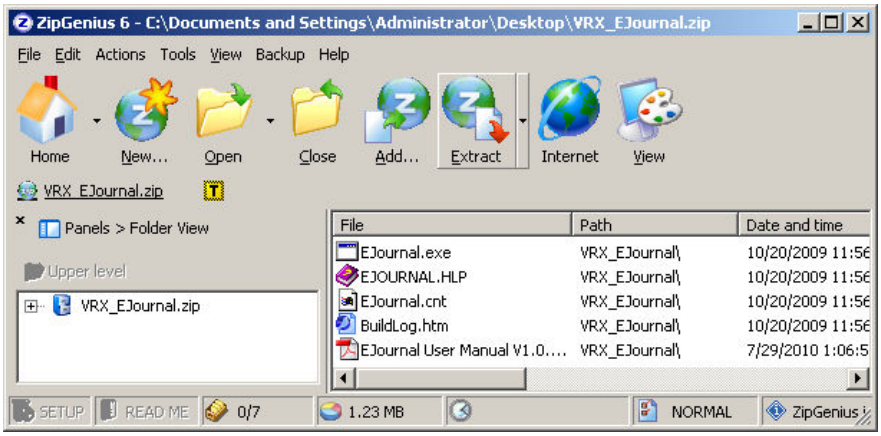
3 Decompressing the VRXLOADER

The VRXLOADER comes as a compressed file and must be uncompressed before it can be used. You may use WinZip, Imploder, ZipGenius or other compatible tools to decompress the file. If necessary find and install one of these tools and allow the program to set the file association for file types ".ZIP"

Copy the compressed file to your desk top.

Double click the file to start the decompression. The utility will open up.

Select **Extract**



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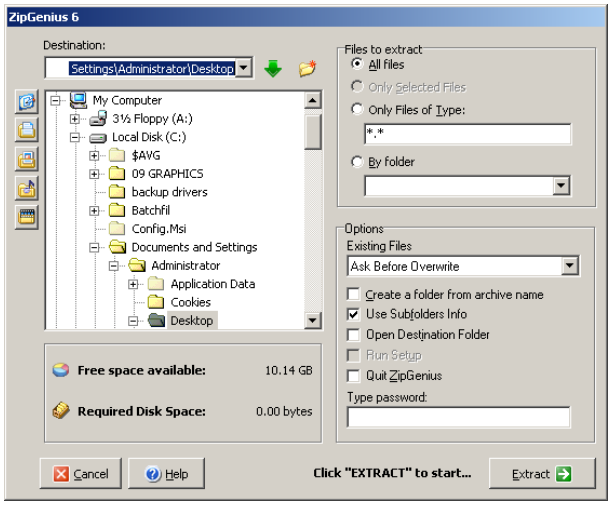
A dialog will open allowing you to select where to place the uncompressed folder with its' files.

Navigate to the desk top. Press the green button to see folder for the tree view if necessary.

Click "**EXTRACT**" to start.

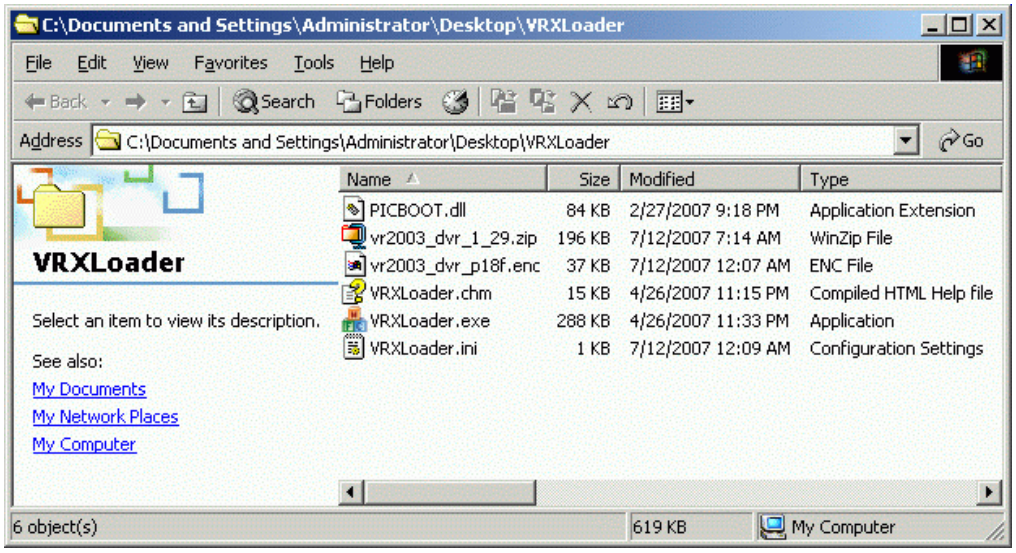
The decompression program will open up. Select the Extract icon to begin decompressing the files.

Put the cursor into the **Extract to** dialog box and copy with <Ctrl>C.



Press the Extract icon to finish the process. You should now see the decompressed files in the folder with the original compressed file.

Open the folder to access the VRXLoader.exe program. Close the compression program and go to the **VRXLoader** folder.


C:\Documents and Settings\Administrator\Desktop\VRXLoader
File Edit View Favorites Tools Help
Back Search Folders
Address C:\Documents and Settings\Administrator\Desktop\VRXLoader
Go
VRXLoader
Select an item to view its description.
See also:
My Documents
My Network Places
My Computer
Name Size Modified Type
PICBOOT.dll 84 KB 2/27/2007 9:18 PM Application Extension
vr2003_dvr_1_29.zip 196 KB 7/12/2007 7:14 AM WinZip File
vr2003_dvr_p18f.enc 37 KB 7/12/2007 12:07 AM ENC File
VRXLoader.chm 15 KB 4/26/2007 11:15 PM Compiled HTML Help file
VRXLoader.exe 288 KB 4/26/2007 11:33 PM Application
VRXLoader.ini 1 KB 7/12/2007 12:09 AM Configuration Settings
6 object(s)
619 KB
My Computer

4 Upgrade Process

The target is the hardware containing the software to be upgraded. Example: VR2004 Text Inserter is a target.

4.1 Set up Target to VRXBOOT

Connect the target hardware video out to a video monitor.

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Press SW1 and cycle power off then on. The monitor should display the message “VRXBOOT” on the top line.

NOTE: You may have to change the video format. See the section below called: Set Video Format

4.2 Run VRXLOADER

Close any applications that may be using a COM port.

Determine your target model number and configure serial communication appropriately.

VR2004 Model Cable Setup

Disconnect all serial connections to the Target.

For the VR2004 Text Inserter, the internal jumper J1 must be on pin1-2 for bidirectional communication between the VRXLoader program and the target hardware.

On the VR2004, you may have to move the Jumper J1 to connect the RDX line to pin 2 to enable two way serial communications with the target hardware.

Connect the serial port of the computer running the VRXLoader directly to the DB9 Serial Input of the target hardware.

Do not try to connect through any port adapters that may block either the serial or the parallel port connections.

VR2003 Model Cable Setup

Disconnect all serial connections to the Target.

Connect the COM port to the target hardware at the serial port. The Serial Output port is usually the best..

Exception You need to use a DB9F-DB9M cable with a DB9F-DB9F gender changer to connect from the PC running VRXLoader into the Serial Output of the Text Inserter.

Do not try to connect through any port adapters that may block either the serial or the parallel port connections.

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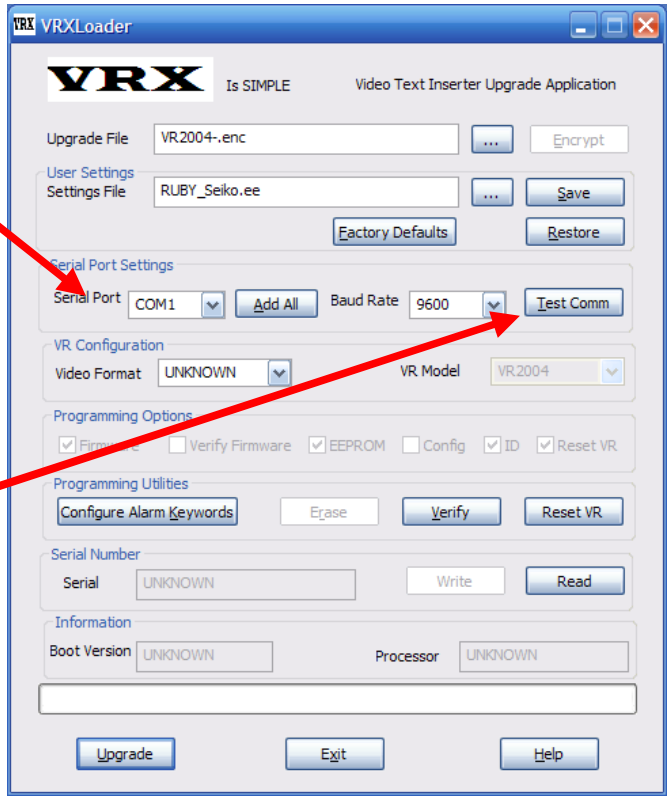
4.3 Test Serial Communications

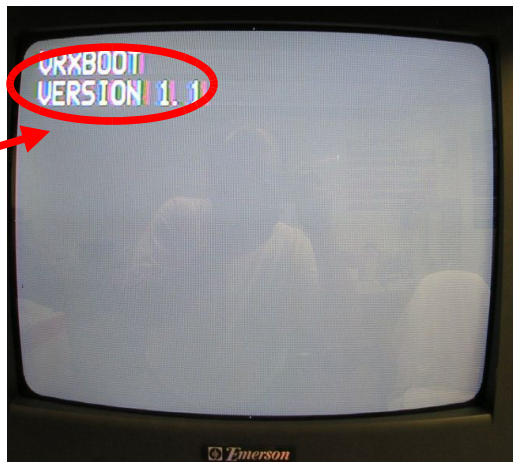
Set the Serial Port Setting dialog for the appropriate COM port.

Test the COM port communications to and from the target . Press the **Test Comm** icon once or twice.



Observe the monitor for the display of the Version number on the second line of the monitor. (See image at right.)

If your COM port and your serial cable connection from the PC to the Text Inserter is correct you will see the version number as in the example to the right.



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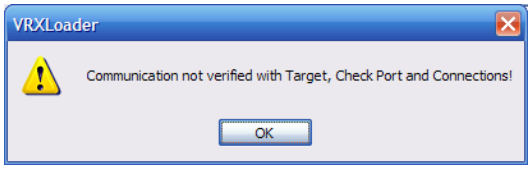
If you get an error.

If the VRX Loader returns a communication error there may be one or more reasons.



COM Port Error

Check that you have identified and are using a real COM port. Warning, USB to Serial Adapters when connected repeatedly to a PC often enumerate successively higher and higher COM port numbers. Use the Windows Hardware Manager to check your COM ports.

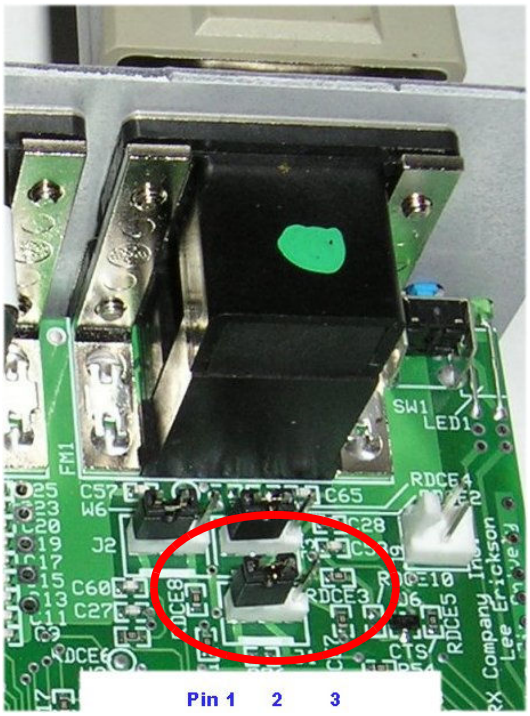
J1 Location Change Required

The internal jumper J1 may need to be moved. With a number 1 Philips screw driver, remove the two black screws holding on the cover of the Text Inserter. Check the location of J1. Compare with the location pictured a right. For programming J1 must be on pins 1-2. It does not matter where J2 and J3 is located.

If necessary move the internal jumper J1 to pins 1-2. Pins 1-2 are the two pins closest to the center of the Printed Circuit Assembly which in this image is to the left..

Test communications again.

If successful, the device serial number will be displayed in the VRXLoader dialog.



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4.4 Set Video Format

Select the drop down box for Video Format.

Change the format selection and the format of the Text Inserter will immediately changed.

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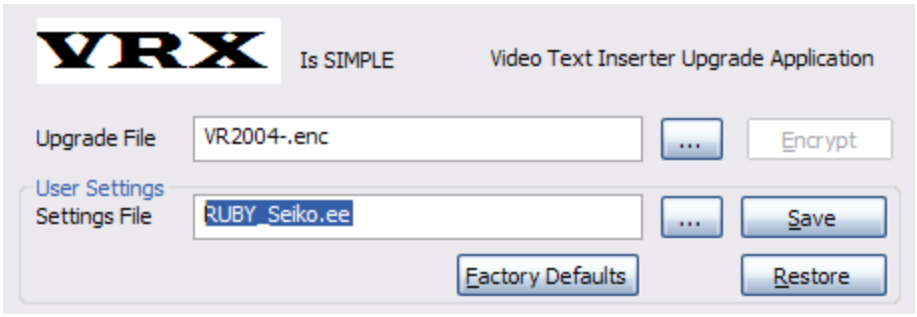
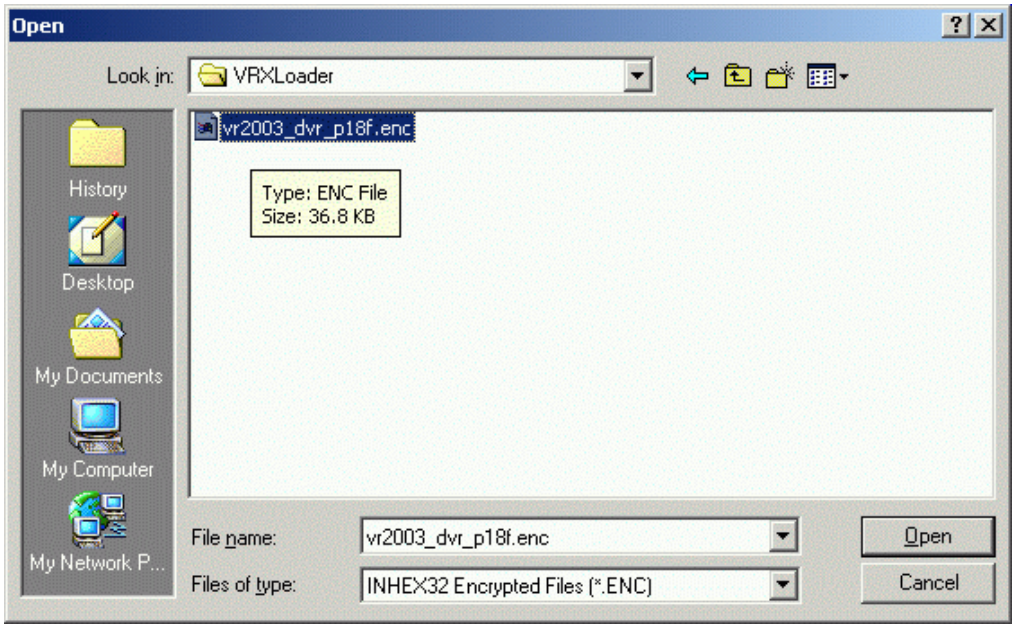
4.5 Set Upgrade and Setting Files

The VRXLoader is usually prepared for the end user with the necessary files preloaded. In this example with the Upgrade file *VR2004-.enc* and the User Settings file *RUBY_Seiko.ee*



You may be instructed to load different files. If necessary, select the Upgrade File by clicking on the "..." icon to the right of the Upgrade File dialog box.

Navigate, type or use <Ctrl>C to paste the file path to the VRXLoader folder.



Select the application file name. In this example, it is **vr2003_dvr_p18f.enc.** Press the **Open** icon to complete the selection. Repeat the above process for the User Setting File. The User Settings File has the extension ".EE" file.

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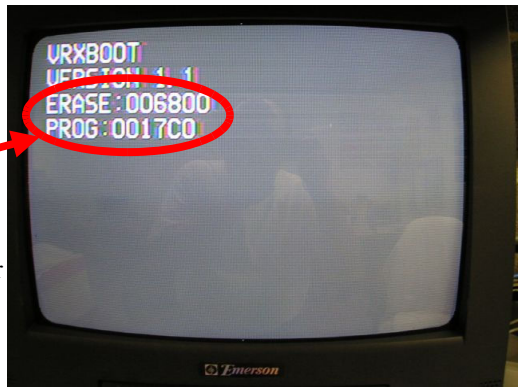
4.6 Upgrade Process

Press the **Upgrade** icon and observe the progress on the monitor and the status bar of the VRXLOADER.

The Monitor shows the progress of the several steps of the upgrade.

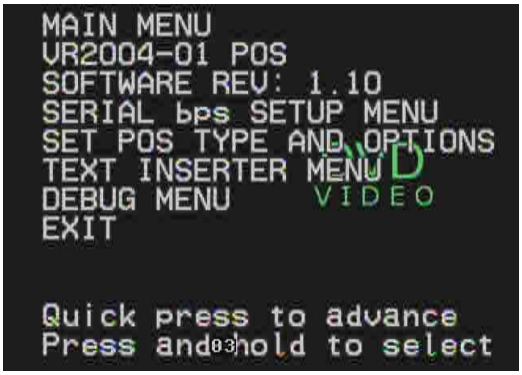
First the Erase message, then the Program message.



Then the EE will be programmed up to FF. Normal termination of the upgrade will occur when the EE massage reaches FF. Then the target should boot to the new application briefly displaying the splash message on screen. The Text Inserter will then enter normal operation.

Press SW1 to read the software version of the new application on the monitor.

Test the new software for functionality by connecting to the Point Of Sale or with a terminal program.



4.7 Restore J1

Replace J1 to the location at which it was located before starting this process.

Replace the cover on the Text Inserter.

5 End of Upgrade Process

Reconnect the Text Inserter to the POS and test.

6 Having trouble?

If you are having compatibility trouble with the Text Inserter, please look for updated information on our web site at www.vrxinc.com

Contact the VRX Company Inc at support@vrxinc.com or by calling 1-865-543-8398 9AM-5 PM Eastern Time. Snail Mail at: VRX Company Inc. PO Box 4663, Maryville, TN 37802-4663

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